



HQ CIVIL WORKS ENGINEERING NOTES

Volume III Number 3

2 December 1997

Notes from Steve Stockton, Chief, Engineering Division

As the holiday season approaches I want to thank all the Civil Works Engineering team members from the Districts to Headquarters for a job well done during 1997. I, also, wish you and your families Happy Holidays.

The New Year will find us facing new challenges and new opportunities. Congress will be continuing to look at our level of private sector contracting. While our Fiscal Year 1998 program was increased by Congress, our future budgets are not as generous. Engineering must develop a market strategy that highlights our areas of expertise and then when we receive work we must produce a quality product on time and within budget. From my visits at Districts and Divisions, I have found that we have the personnel to meet these challenges; therefore, I remind you change will come with the New Year and change is necessary for us to be continue to be the Nation's Engineer of Choice.

[Stockton, (202) 761-0215]

CURRENT NEWS FROM CWE

DAM SAFETY ASSURANCE PROGRAM REGULATION PUBLISHED

A new version of ER 1110-2-1155, *Dam Safety Assurance Program*, was recently

This Month's Contents

- Notes from Steve Stockton
- Dam Safety Assurance Program Regulation Published
- Draft Revision to Hydroelectric Design Center Regulation
- Use of Notes for Advanced Review of Regulations and Other Policy Guidance
- Policy Review of Work for Others
- Electro-Osmotic Pulse (EOP) Technology for Water Seepage Control
- Electronic Bid Solicitations (EBS) Update
- ICODS Dam Safety Seminar Scheduled For February

signed by the Chief of Staff. The new regulation is dated 12 September 1997. The Dam Safety Assurance Program (DSAP) provides for modification of completed

Corps projects when deemed necessary for safety purposes due to new hydrologic or seismic data, or changes in state-of-the-art design or construction criteria.

The new regulation provides the latest hydrologic and seismic dam safety policy, outlines the seismic safety evaluation process, and provides the content for required reports. It also includes the latest policy on cost sharing and funding, which requires that DSAP projects compete for construction funding as budgeted new-starts.

HQ CIVIL WORKS ENGINEERING NOTES - Vol. III No. 3 - 2 December 1997 (cont'd)

It will be distributed shortly, and will also be available on the Internet through the links to regulations on the Corps homepage.
[Bank, (202) 761-1660]

DRAFT REVISION TO HYDROELECTRIC DESIGN CENTER REGULATION

A copy of a draft revision to ER 1110-2-109, Hydroelectric Design Center, is attached for your review. Please review and provide comments on this draft revision. Comments can be e-mailed directly to Daniel Casapulla, but please coordinate and consolidate all district and division comments so that one set of comments will be forwarded from each MSC command. Comments are requested by 30 January 1998.
[Casapulla, (202) 761-4535]

USE OF NOTES FOR ADVANCED REVIEW OF REGULATIONS AND OTHER POLICY GUIDANCE

While from time to time advanced copies of draft regulations and other documents will be included in the Engineering Notes for review, officials comments will be requested by formal memorandum. All elements that make comments on documents included in the Notes should insure that their comments are, also, officially submitted through channels in response to the formal request for comments. [Pearre, (202) 761-4531]

CWE INFORMATION

POLICY REVIEW OF WORK FOR OTHERS

For the most part, work for others does not receive the same level of policy review that is given to standard Civil Works projects. However, in the case of designing dams, as work for others, the Corps of Engineers incurs the same level of legal liability that it incurs in the design of Civil Works dams. Therefore, all design documentation for all dams must receive a Washington level policy review. In the case of standard Civil Works dams, this review is accomplished when the project feasibility report with an Engineering Appendix is reviewed and approved by HQUSACE. Since dams designed as Work for Others do not have feasibility reports, the design documentation for those projects must be submitted to CECW-E for policy review. The definition of a dam under the National Dam Safety Program should be used for determining which Work for Others dams must be submitted for review. A separate guidance letter on policy review of dams will be issued during December 1997.
[Pearre, (202) 761-4531]

DID YOU KNOW

ELECTRO-OSMOTIC PULSE (EOP) TECHNOLOGY FOR WATER SEEPAGE CONTROL

Below-ground concrete facilities such as operating galleries, basements, and elevator shafts can sustain structural damage if there is a chronic water seepage through the walls. Water causes corrosion of steel reinforcement bars and cracks concrete walls. The high humidity room air accelerates the corrosion rate of mechanical equipment in the area and creates unacceptable air quality due to the rapid growth of bacteria and mold

HQ CIVIL WORKS ENGINEERING NOTES - Vol. III No. 3 - 2 December 1997 (cont'd)

in the room. Traditional methods for correcting water seepage involve the application of sealants or costly excavation to place drainage tiles around the facility exterior. The Electro-Osmotic Pulse technology represents a promising alternative. It uses two sets of electrodes; one set is mortared directly into the concrete walls and the other is placed in the surrounding soil. A DC voltage is applied between the electrodes to produce an electric field in the walls which moves water from the dry side of the walls toward the wet side, against the hydraulic gradient. The U.S. Army Construction Engineering Research laboratories (CERL) has installed systems in several wet basements with great success and cost savings. For more information, the CERL points of contact on the subject are Mr. Vincent Hock at 217-373-6753 and Mr. Michael McInerney at 217-373-6759. [Wu, (202) 761-8614]

ELECTRONIC BID SOLICITATIONS (EBS) UPDATE

In last month's Engineer Notes, there was an article outlining targets for the implementation of EBS for the Civil Works Program. After those notes were published the FY98 target was changed as follows:

"For FY98 all construction projects over \$5,000,000 should be in EBS format, unless use of EBS will impact scheduled awards."
[Miles, (202) 761-8885]

No questions were received from the field for inclusion in the December notes.

Questions are needed by the 15th of the month for the next issue of HQ CIVIL WORKS ENGINEERING NOTES.

Questions can be sent by FAX to (202) 761-4002 or by e-mail to Charles Pearre. [Pearre, (202) 761-4531]

DAM SAFETY PROGRAM

ICODS DAM SAFETY SEMINAR SCHEDULED FOR FEBRUARY

Application forms for the 1998 Interagency Committee on Dam Safety training seminar, 18-19 February 1998, at the FEMA National Emergency Training Center in Emmitsburg, Maryland, should be available later this month. Copies of the form will sent by E-mail to all dam safety coordinators. The topic of this year's seminar is "Mitigation of the Hazards of Dams."
[Bank, (202) 761-1660]

District submissions of dam safety items of interest, including dam safety incidents (Corps or other), for inclusion in this section are requested. Information is needed by the 15th of each month.
[Pearre, (202) 761-4531]

YOU ASKED

HQ CIVIL WORKS ENGINEERING NOTES - Vol. III No. 3 - 2 December 1997 (cont'd)

FIELD INFO TO SHARE

Districts are encourage to submit information for this section. Also, tell us your ideas on how HQ CWE can do it better and what you would like to know about. Your information is needed by the 15th of the month for the next issue. [Wallace, (202) 761-8890]

REMINDER

These HQ Civil Works Engineering Notes are now available on the Internet. You can the access the Notes directly at "<http://www.usace.army.mil/inet/functions/cw/cecwe/notes/>".